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## PATENT ABSTRACTS OF JAPAN

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(21) Application number: **10148088**(71) Applicant: **TOYOTA MOTOR CORP**(22) Date of filing: **28.05.98**(72) Inventor: **HIRABAYASHI TAKESHI**(54) **PURIFICATION OF EXHAUST GAS**

## (57) Abstract:

**PROBLEM TO BE SOLVED:** To improve the reduction/purification efficiency of NO<sub>x</sub> by controlling the sulfur poisoning of the NO<sub>x</sub> absorbent of an exhaust gas purifying catalyst.

**SOLUTION:** In this purification method, an exhaust gas purifying catalyst in which a noble metal and an NO<sub>x</sub> absorbent are supported on a porous carrier is used. When the air fuel ratio of the mixed gas of fuel to be supplied to an internal combustion engine and air is lean, NO<sub>x</sub> in exhaust gas is absorbed in the catalyst, and when the air fuel ratio is stoichiometric-rich, the absorbed NO<sub>x</sub> is reduced into N<sub>2</sub> by a reducing gas in the exhaust gas and the noble metal. Hydrocarbons are added steadily to the catalyst in a concentration range in which a hydrocarbons concentration is at the lowest 1000 ppm, and lower than a value which makes the air fuel ratio of a lean mixed gas to be supplied to an internal combustion engine stoichiometric.

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